

WHAT IS CLAIMED IS:

1. A method for identifying a compound that inhibits the ubiquitination reaction mediated by the Anaphase Promoting Complex (APC), comprising determining a test compound's ability to interfere with the formation of multiubiquitin chains by APC11.
2. The method of claim 1, wherein APC11 is incubated, together with a ubiquitin activating enzyme (E1), a ubiquitin conjugating enzyme (E2), ubiquitin and ATP for a period of time sufficient to obtain a measurable level of ubiquitination of APC11, and the level of ubiquitination of APC11 in the presence of said test compound is compared to the level of ubiquitination of APC11 in the absence of said test compound.
3. The method of claim 1, wherein APC11 is incubated, together with a ubiquitin activating enzyme (E1), a ubiquitin conjugating enzyme (E2), ubiquitin and ATP for a period of time sufficient to obtain a measurable level of multiubiquitin chains, and the level of multiubiquitin chains in the presence of said test compound is compared to the level of multiubiquitin chains in the absence of said test compound.
4. The method of claim 1, wherein APC11 is incubated, together with a ubiquitin activating enzyme (E1), a ubiquitin conjugating enzyme (E2), ubiquitin, ATP and an APC substrate protein for a period of time sufficient to obtain a measurable level of ubiquitination of the substrate protein and the level of ubiquitination of the APC substrate protein in the presence of said test compound is compared to the level of ubiquitination of the APC substrate protein in the absence of said test compound.
5. The method of claim 2, wherein said APC11 is human.

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6. The method of claim 3, wherein said APC11 is human.
7. The method of claim 4, wherein said APC11 is human.
8. The method of claim 2, wherein said E2 is the human variant
UBCH5b.
9. The method of claim 3, wherein said E2 is the human variant
UBCH5b.
10. The method of claim 4, wherein E2 is the human variant
UBCH5b.
11. The method of claim 5, wherein E2 is the human variant
UBCH5b.
12. The method of claim 6, wherein E2 is the human variant
UBCH5b.
13. The method of claim 7, wherein E2 is the human variant
UBCH5b.
14. The method of claim 2, wherein E1 is wheat UBA1.
15. The method of claim 3, wherein E1 is wheat UBA1.
16. The method of claim 4, wherein E1 is wheat UBA1.
17. The method of claim 5, wherein E1 is wheat UBA1.

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18. The method of claim 6, wherein E1 is wheat UBA1.
19. The method of claim 7, wherein E1 is wheat UBA1.
20. The method of claim 8, wherein E1 is wheat UBA1.
21. The method of claim 9, wherein E1 is wheat UBA1.
22. The method of claim 10, wherein E1 is wheat UBA1.
23. The method of claim 11, wherein E1 is wheat UBA1.
24. The method of claim 12, wherein E1 is wheat UBA1.
25. The method of claim 13, wherein E1 is wheat UBA1.
26. The method of claim 4, wherein said APC substrate protein is CyclinB.
27. The method of claim 4, wherein said APC substrate protein is Securin.

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